

# Advisory Wire

REFERENCE NO:	AW700-34-0505, Rev 03	INFORMATION TYPE:	Operational
ATA:	34-61	EFFECTIVITY:	Global Express / XRS (9002 - 9312, 9314 - 9380, 9384 - 9429) Global 5000 (9127 to 9383, 9389 to 9400, 9404 to 9431 and 9998)
SUBJECT:	<b>Post Batch 3, Batch 3.3 and Batch 3.4 Upgrade – Flight Management System (FMS) – Incorrect Level Off at an Altitude Constraint</b>		

## 1. REFERENCES:

- 1.1. Honeywell Service Information Letter (SIL) D201211000024R004, FMZ-2000 Flight Management System (FMS) Version NZ6.1 – Incorrect Level Off at an Altitude Constraint, dated 23 Oct 2019
- 1.2. Bombardier Service Bulletin (SB) 700-31-030 / 700-1A11-31-014, Modification – Integrated Avionics Computer (IAC) System – Batch 3 Software Upgrade
- 1.3. Bombardier Service Bulletin (SB) 700-31-034 / 700-1A11-31-017, Modification – Integrated Avionics Computer (IAC) System – Batch 3.3 Software Upgrade
- 1.4. Bombardier Service Bulletin (SB) 700-31-039 / 700-1A11-31-021, Modification – Integrated Avionics Computer (IAC) System – Batch 3.4 Software Upgrade

References 1.1 to 1.4 are available on the Bombardier Customer Portal:  
([my.businessaircraft.bombardier.com](http://my.businessaircraft.bombardier.com)) > Library > Search by Keyword

## 2. INTRODUCTION:

Revision 3 of this Advisory Wire (AW) provides an update following the release of the revised Honeywell SIL (Ref. 1.1) and the Bombardier SB Batch 3.4 Software Upgrade (Ref. 1.4). It also advises operators and flight crew of an anomaly that may occur during descent where the FMS may incorrectly level off above a waypoint with an altitude constraint.

Honeywell FMS software version NZ6.1 post Batch 3 upgrade (Ref. 1.2, IC-810, IAC PN 7017300-61010), post Batch 3.3 upgrade (Ref. 1.3, IC-810, IAC PN 7017300-61013) and post Batch 3.4 upgrade (Ref. 1.4, IC-810, IAC PN 7017300-61014) currently installed on the Global Express/5000/XRS are affected by this condition.

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## 3. DESCRIPTION:

A situation is described in the Honeywell SIL (Ref. 1.1), where the flight crew entered a waypoint with an altitude constraint from a transition point. In the SIL example, a descent in Vertical Flight Level Change (VFLC) is performed in an attempt to reach the previously selected altitude constraint. At the moment the aircraft crosses the transition point, it transfers from VFLC to Vertical Path (VPTH) mode and levels off at a wrong, higher altitude. The FMS continues on the wrong level off altitude until the final VPTH is intercepted. Then the aircraft starts to descend to the initial selected altitude constraint and incorrectly levels off at that altitude constraint instead of continuing down the final approach path.

- | **NOTE:** Post Batch 3.3 (Ref. 1.3) and post Batch 3.4 (Ref. 1.4) software upgrade, leveling off above the altitude constraint is not corrected (Figure 3 of Ref. 1.1). The FMS will no longer level off as depicted in Figure 5 (Ref. 1.1), but rather continue correctly with the final approach vertical path as intercept (Figure 4 of Ref. 1.1) and will continue the descent in VPTH as expected.

## 4. ACTION:

Operators should be familiar with the condition detailed in the Honeywell SIL (Ref. 1.1) and if an early level off in VPTH is experienced, flight crews must take the necessary action to achieve the desired altitude.

- | This anomaly was partially corrected in the Batch 3.3 (Ref. 1.3) and Batch 3.4 (Ref. 1.4) software upgrade. Should you have any queries pertaining to this Advisory Wire (AW), please contact your Bombardier Field Service Representative (FSR) or the Customer Response Center (CRC).